ENVIRONMENTAL CHEMISTS

Date of Report: 09/26/97 Date Received: 09/11/97

Project: Metro Self Monitor, PO #M58349

Date Samples Extracted: 09/17/97 Date Extracts Analyzed: 09/23/97

RESULTS FROM THE ANALYSIS OF THE WATER SAMPLE FOR CHROMIUM, COPPER, NICKEL, ZINC USING METHOD 6010

Samples Processed Using Method 3005A

Results Reported as mg/L (ppm)

Sample ID	<u>Chromium</u>	<u>Copper</u>	<u>Nickel</u>	<u>Zinc</u>
M58349	0.27	0.24	0.26	<0.05
Method Blank	< 0.05	< 0.05	< 0.05	< 0.05

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Project: Metro Self Monitor, PO #M58349

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TOTAL METALS BY INDUCTIVELY COUPLED PLASMA (ICP) (METHOD 6010)

Laboratory Code: 709071-01 (Duplicate)

						Relative	
	Reporting		Sample		Duplicate	Percent	Acceptance
Analyte:	Units	45.45	Result	est ga a	Result	Difference	Criteria
Chromium	mg/L (ppm)		0.84		0.79	6	0-20
Copper	mg/L (ppm)		0.73		0.76	4	0-20
Nickel	mg/L (ppm)		0.84		0.83	1	0-20
Zinc	mg/L (ppm)		0.14		0.13		0-20

Laboratory Code: 709071-01 (Matrix Spike)

Analyte:	Reporting Units	Spike Level	Sample Result		Recovery	
Chromium	mg/L (ppm)	5	0.84	94		
Copper	mg/L (ppm)	5	0.73	94		
Nickel	mg/L (ppm)	10	0.84	92		
Zinc	mg/L (ppm)	5	0.14	102	, N. U.T. A	

Laboratory Code: Spike Blank

						Relative			
	Reporting	Spike	% F	Recovery	Acceptance	ce Percent			
Analyte:	<u>Units</u>	Level	MS	MSD	Criteria	Difference			
Chromium	mg/L (ppm)	5	110	94	80-120	16			
Copper	mg/L (ppm)	5	101	98	80-120	3			
Nickel	mg/L (ppm)	10	101	82	80-120	21			
Zinc	mg/L (ppm)	5	95	92	80-120	3			

FRIEDMAN & BRUYA, INC. 3012 16th Avenue West Seattle, WA 98119-2029 (206) 285-8282

PJ# 709053 MK AI 09.11.97 1:25

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ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D. Charlene Jensen, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S. 3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044 e-mail: fbi@isomedia.com

September 26, 1997

DUPLICATE COPY

INVOICE #97ACU0926-2

Accounts Payable Alaskan Copper Works 628 South Hanford St. Seattle, WA 98134

RE: Project Metro Self Monitor, PO #M58349: Results of testing requested by Gerry Thompson for material submitted on September 11, 1997.

1 water sample analyzed for Chromium, Copper, Nickel, and Zinc using Method 6010 @ \$65 per sample \$ 65.00

Amount Due \$ 50.00

FEDERAL TAX ID #(b) (6)

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D. Charlene Jensen, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S. 3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044 e-mail: fbi@isomedia.com

September 26, 1997

Gerry Thompson, Project Manager Alaskan Copper Works 628 South Hanford St. Seattle, WA 98134

Dear Mr. Thompson:

Included are the results from the testing of material submitted on September 11, 1997 from your Metro Self Monitor, PO #M58349 project.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Kurt Johnson

Chemist

Enclosures ACU0926R.DOC